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EXAMINER
SALCE, JASON P

ART UNIT	PAPER NUMBER
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/681,354	FRIES ET AL.
	Examiner	Art Unit	
	Jason P. Salce	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 March 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-15,17,18,20-29,31,32 and 36-42* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-15,17,18,20-29, 31-32 and 36-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 3/24/2006 have been fully considered but they are

not persuasive.

Applicant's argue the primary references (Nguyen, Takagawa, De Vito and

Tsuria) fail to disclose or suggest a hardware card that is utilized to enable a television

tuning device to access EPG data other than EPG data that the television tuning device

was originally programmed to receive (note claim 1 does not recite this limitation, as

opposed to claims 13, 17 and 21). The examiner disagrees and notes that the

combination of the primary references of Nguyen and Takagawa clearly teaches this

limitation. Note that Takagawa discloses a hardware card that comprises an encoded

URL that allows a user to insert the hardware card into a computing device and access

the Internet using the URL encoded onto the hardware card. However, Takagawa is

silent as to the type of URL data (which website to access) that can be encoded onto

the hardware card. Nguyen is used to teach that a computing device (set-top box) that

is capable of accessing a URL that directs the computing device to a specific EPG

provider other than the EPG provider hard-coded into the set-top device (see Paragraph

0004, Lines 3-5 and Paragraph 0006 and Figure 8). Nguyen even teaches a smart card

interface (see Figure 2), which clearly provides an input for the hardware card of

Takagawa. Therefore it would have been obvious to modify the hardware card with

URL, as taught by Takagawa, to contain a URL that accesses a specific EPG server

that can be inserted into a set-top box, as taught by Nguyen, for the purpose/motivation

stated in the previous Office Action. The Applicant also notes that Takagawa is non-analogous art, because Takagawa is simply a computing system, however, Nguyen is also simply a computing system, and one of ordinary skill in the art, would easily be able to make the modification to Takagawa by simply encoding a specific URL directed to an EPG provider. Further note that Tsuria is simply used to teach that a viewer can purchase a hardware card in a television system environment.

In regards to the arguments on Pages 15-17 that specifically argue each reference individually, the examiner notes that Applicant has disregarded what the examiner has used these reference to teach and simply provides a very broad overview of each reference and states how this broad overview does not teach the claim limitations. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the references are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, all of the references are provided in a computing environment that accesses the Internet via a URL.

In response to applicant's argument that the examiner has combined an

excessive number of references, reliance on a large number of references in a rejection

does not, without more, weigh against the obviousness of the claimed invention. See *In*

re Gorman, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

In view of the claim amendments made by the Applicant, the examiner notes that

the combinations of the primary references (noted above) still read on the claims (see

rejection below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-2, 4-5, 8, 10-12 and 40 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Takagawa et al. (U.S. Patent No. 5,987,612) in view of Nguyen et al.

(U.S. Patent Application Publication 2002/0010932) in further view of Tsuria (U.S.

Patent No. 6,405,369).

Referring to claim 1, Takagawa discloses a hardware card comprising a case

having a form factor (see IC or magnetic card 9b in Figures 1 and 2 and Column 4,

Lines 10-12) and a non-volatile memory situated within the case (see Column 4, Line 12

for the cards storing data <u>within</u> the card) and having loadable data including a URL

corresponding to a server (see Column 4, Lines 57-60), the card further comprising

means for providing the data to a computer to enable the computer to connect to a

server (see Column 4, Line 66 through Column 5, Line 2).

Takagawa also discloses that the server (WWW server 6 in Figure 1), upon being

connected to by the computer (see step S12 in Figure 5), uses identification information .

obtained from the hardware card (see step S15 in Figure 5) to determine a type of

programming information that has been encoded onto the hardware card to indicate to

the at least one server the type of EPG information on the hardware card (see Column

4, Lines 29-32) and thereafter enables the computer to access the data on the server

(see Column 5, Lines 2-5 and step S16 in Figure 5).

Takagawa fails to disclose that the URL is used to connect a television-tuning

device to a WWW Server containing an electronic program guide (EPG) from a plurality

of EPG providers.

Nguyen discloses a television-tuning device (see set top box 22 in Figure 1) that

contains an input for a hardware card that can be loaded onto the television-tuning

device (see smart card reader 140 in Figure 2 and Paragraph 0035). The television-

tuning device is capable of being instructed to access an WWW (EPG) server using

URL data that provides information on how and where to contact an EPG provider from

among a plurality of EPG providers (see Paragraph 0024), thereby returning information

as to how and where to receive the type of EPG information indicated by the URL and

associated with the additional information that the URL **corresponds to**.

Nguyen also discloses that the URL additionally **corresponds to** additional identification information indicative of a type of electronic programming guide information that can be accessed (see again Paragraph 0024).

The examiner notes that the URL data **corresponds to** how and where to contact a WWW server containing an EPG and additional information indicative of the type of EPG guide information (Yahoo's EPG information).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the hardware card with WWW Server access using a URL, as taught by Takagawa, to utilize the television tuning device with hardware card reader, which uses a URL to access an EPG provider, as taught by Nguyen, for the purpose of allowing a user to invoke a web based electronic program guide seamlessly upon execution of an appropriate command to retrieve the EPG (see Paragraph 0048 of Nguyen).

Takagawa and Nguyen fail to disclose that a consumer may purchase the hardware card.

Tsuria discloses that consumers purchase hardware cards from a vendor (see Column 6, Lines 9-15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify receipt of a consumer's hardware card, as taught by Takagawa and Nguyen, to allow a consumer to purchase a hardware card from a vendor, as taught by Tsuria, for the purpose of preventing substantial losses to operators of television transmission systems (see Column 1, Lines 26-27 of Tsuria).

Referring to claim 2, Takagawa and Nguyen disclose that the data represents one or more loader programs for the television-tuning device (see the rejection of claim 1 for the hardware card of Takagawa being modified to be inserted into a STB, which accepts hardware cards and can access an EPG from an EPG provider and further note that the URL stored on the hardware card is a loader program that is provided to the STB), each loader program corresponding to an EPG (see Paragraph 0048, Lines 25-27 for the URL corresponding to the EPG).

Referring to claim 4, Nguyen discloses that each loader program includes specification of a transmission network over which encoded EPG information is received from the EPG provider to which the loader program corresponds (see Paragraph 0046 for the URL (loader program) including a specification of a transmission network, where the Internet is the transmission network specified by a URL).

Referring to claim 5, Nguyen discloses an out-of-band modem in Paragraph 0046.

Referring to claim 8, Nguyen discloses that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file).

Referring to claim 11, Nguyen discloses that the television-tuning device is a set-top box (see Paragraph 0008 and set top box 22 in Figure 1).

Referring to claims 10 and 12, Nguyen discloses that a flash memory can be utilized (see Paragraph 0055).

Referring to claim 40, Nguyen discloses that the server enables the television-tuning device to access the EPG by providing the EPG to the tuning device (see paragraph 0046).

3.   Claims 6-7, 9, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagawa et al. (U.S. Patent No. 5,987,612) in view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Tsuria (U.S. Patent No. 6,405,369) in further view of De Vito et al. (U.S. Patent No. 6,452,616).

Referring to claim 6, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that each loader program comprises a database segment to transfer the loader program into the television-tuning device.

De Vito discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment

that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with additional data (database segment), as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 7, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that each loader program comprises a segment to provide a user interface.

De Vito discloses that each loader program (data stored on the smart card) includes a segment to provide a user interface (see Column 10, Lines 18-30 for the Card Retrieval function providing a segment (program code) needed to provide the display screen).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with additional data (user interface segment), as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 9, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that non-executable information is decodable by a decoder segment of the television-tuning device.

De Vito discloses that the non-executable information is decodable by a decoder segment of the television-tuning device (see Column 4, Lines 54-60 for decoding the scrambled data packet by a descrambler circuit 7 (segment of the television-tuning device) in Figure 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with non-executable information, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 31, Nguyen discloses that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file), but Takagawa, Nguyen and Tsuria fail to disclose that the hardware card specifies to a user what the user must do to load the data into the television-tuning device.

De Vito teaches that the hardware card specifies to a user what the user must do to load the data into the television-tuning device (see Figure 2 for providing the user interface which instructs a user how to access data on the smart card).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card that specifies to a user what the user must do to load the data into the television device, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Claim 32 corresponds to claim 31, where De Vito further discloses that a password can be entered in order to access a parental lock function (see Figure 2 and Column 7, Line 48).

4.   Claims 13-15, 17-18, 20, 36-38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in view of Takagawa et al. (U.S. Patent No. 5,987,612) in further view of De Vito et al. (U.S. Patent No. 6,452,616).

Referring to claim 13, Nguyen discloses a television-tuning system comprising a television tuning device including an outer case having a slot to accept a hardware card (see elements 22 and 140 in Figure 1).

Nguyen also discloses internal components (see Figure 2) hard-coded to a particular EPG provider (see Paragraph 0004, Lines 3-5 and note that if the EPG is received from a specific cable or satellite provider, then the STB is inherently hard-coded to continuously receive the EPG from the cable or satellite provider).

Nguyen also discloses other internal components configured to receive
information loaded into the television tuning device to allow for reception of EPG
information from other EPG providers in addition to the particular EPG provider hard-
coded into the internal components (see Paragraphs 0006, Paragraph 0046 and Figure
2).

Nguyen also discloses switching to the at least one other EPG provider than the
particular EPG provider that the television-tuning device is hard-coded to (see again
Paragraph 0006 and Figure 8).

Nguyen also discloses one or more connections within the outer case to
communicatively couple the device to a display (see connection 166 in Figure 2).

Nguyen further disclose one or more storage locations storing an EPG loader
program corresponding to each of the one or more EPG providers (see Paragraph 0027
for the CPU and memory controlling operation of the entire STB and Paragraph 0006 for
executing code stored on the STB to access a web-based EPG, therefore the portion of
code that invokes the browser to access the EPG over the Internet is an EPG loader
program), each stored EPG loader program designed to access information to configure
the television tuning device to access EPG information from one of the other EPG
providers (see Paragraph 0004, Lines 3-5 and note that if the EPG is received from a
specific cable or satellite provider, then the STB is inherently hard-coded to
continuously receive the EPG from the cable or satellite provider).

Nguyen further discloses a portion of code that is executed by the set-top boxes
CPU, which will receive and decode the EPG information received from the EPG

provider (see Paragraph 0044) and to identify a specific transmission network to retrieve

the EPG information therefrom (see Paragraph 0046 for specifying to receive a program

guide over the Internet using the URL).

Further note Nguyen provides means for switching to an electronic program

provider other than the particular EPG provider that is hard-coded into the internal

components (see Paragraph 0046).

Nguyen fails to teach that the hardware card provides the device with data

instructing the television-tuning device to receive information over the Internet (such as

EPG information).

Takagawa discloses a hardware card having an acceptable form factor for

insertion into the slot (see Figure 4), comprising a case having a form factor (see IC or

magnetic card 9b in Figures 1 and 2 and Column 4, Lines 10-12) and a non-volatile

memory situated within the case (see Column 4, Line 12 for the cards storing data

within the card) and having data including a URL corresponding to a server (see

Column 4, Lines 57-60), the card further comprising means for providing the data to a

computer to enable the computer to connect to a server over the Internet transmission

network (see Column 4, Line 66 through Column 5, Line 2), wherein the server, upon

being connected to by the computer, indicates how to access the data on the server

(see Column 5, Lines 2-5). Therefore, Takagawa provides a hardware card storing data

(the URL) configured to provide the device with capability to received Internet data

(EPG data provided over the Internet by Nguyen).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the STB, as taught by Nguyen, to accept a hardware card that accesses data from the Internet, as taught by Takagawa, for the purpose of providing a simpler way to retrieve data and provide an environment for a user to easily access the Internet (see Column 11, Lines 65-66 of Takagawa).

Nguyen and Takagawa fail to disclose the specifics of the loader program functionality discussed in the rejections of claims 3 (now cancelled) and claims 6-7 and 31.

De Vito discloses that each loader program comprises a decoder segment (see Column 4, Lines 35-62 for using ECM data for descrambling scrambled (encoded) data packet payload information) to decode encoded (scrambled) electronic program guide information (see Column 3, Lines 47-56 for distributing incoming data packet information to the appropriate applications and Column 3, Lines 60-64 for an application being a program guide, which uses the incoming information (scrambled/encoded data packets) which are descrambled using the ECM data described at Column 4, Lines 35-62) from the electronic program guide provider to which the loader program corresponds (see Figure 4 and Column 10, Lines 42-55 for the user interface module (loader program) being integrated into the main user interface stored in the viewer's television tuning device and that the main user interface program guide data is received from an electronic program guide provider (see again Column 3, Lines 40-64)). Also note that the ECM data in the data packets are received from the broadcaster (see Column 4, Lines 37-42) and are stored in the smart card 10 (see Column 4, Lines 54-

56), therefore the loader program (user interface module and entitlement data (ECM and EMM data)) corresponds to the electronic program guide provider.

The examiner notes that because of the broad recitation of "loader program" the examiner is interpreting a "loader program" to be any piece of data provided by the hardware card that is used to provide a piece of functionality to the STB after it is plugged into the STB card reader (see smart card reader 140 in Figure 2 of Nguyen).

De Vito also discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place. Therefore, De Vito provides a database segment that allows pieces of data to be transferred from a hardware card to other internal components of a STB.

De Vito also discloses that each loader program (data stored on the smart card) includes a segment to provide a user interface (see Column 10, Lines 18-30 for the Card Retrieval function providing a segment (program code) needed to provide the display screen) and that the hardware card contains information that specifies to a user what the user must do to load the data into the television-tuning device (see Figure 2 for providing the user interface which instructs a user how to access data on the smart card).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Nguyen and Takagawa, using the hardware card code segments, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Claim 14 corresponds to claim 13, where Nguyen further discloses that a flash memory can be utilized (see Paragraph 0055).

Claim 15 corresponds to claim 13, where Nguyen and Takagawa disclose all of the limitations in claim 13, as well as Nguyen further disclosing that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file), but fail to teach that the data stored is decodable by a decoder segment of the television tuning device.

De Vito discloses that the non-executable information is decodable by a decoder segment of the television-tuning device (see Column 4, Lines 54-60 for decoding the scrambled data packet by a descrambler circuit 7 (segment of the television-tuning device) in Figure 1).

Referring to claim 17, see the rejection of claim 13.

Claim 18 corresponds to claim 17, where De Vito discloses that the loader

program (data stored on the smart card) includes a database segment to transfer the

loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting

the smart card and transferring the user interface module (loader program) into the

decoder). Therefore, the database segment that provides data transfer from the smart

card to the decoder is provided by De Vito, otherwise no data transfer would be able to

take place.

Referring to claim 20, Nguyen discloses smart card reader 140 in Figure 2,

therefore a smart card (hardware card) can inherently be removed or inserted in order

for the STB to read information from the smart card.

Claim 36 corresponds to claim 18, where Nguyen further discloses that the EPG

provider and the other EPG provide encode the EPG information differently (see

Paragraph 0024 for receiving EPG information from an Internet provider and an EPG

server of a cable or satellite provider and Paragraph 0044 for receiving the EPG

information from the Internet provider in HTML form). The examiner notes that since

the EPG information received from the Internet provider is in HTML form and the EPG

provider from the cable or satellite provider is received from the television channel tuned

by a user that the two different types of EPG information is encoded differently, one in

HTML form and one in television signal form.

Referring to claim 37, Nguyen discloses that the web based EPG and the EPG

provided from the cable or satellite provider contains different types of quality (see

paragraph 0046 for the STB being capable of receiving EPG information from a service

provider as well as the Internet, therefore since the type of information from each source

provides different information, the EPG information inherently contains a different type

of quality.

Referring to claim 38, see the rejection of claim 36.

Referring to claim 42, see the rejection of claim 37.

5.   Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen

et al. (U.S. Patent Application Publication 2002/0010932) in view of Takagawa et al.

(U.S. Patent No. 5,987,612) in further view of De Vito et al. (U.S. Patent No. 6,452,616)

in further view of Tsuria (U.S. Patent No. 6,405,369).

Claim 41 corresponds to claim 17, where Takagawa further discloses that the

server (WWW server 6 in Figure 1), upon being connected to by the computer (see step

S12 in Figure 5), uses identification information obtained from the hardware card (see

step S15 in Figure 5) to determine a type of programming information that has been

purchased by a consumer of the card (see Column 4, Lines 29-32) and thereafter

enables the computer to access the data on the server (see Column 5, Lines 2-5 and

step S16 in Figure 5). Also note the rejection of claim 17 for the URL containing a link

to an EPG provider, which is transmitted by the server.

Nguyen, Takagawa and De Vito fail to disclose that a consumer may purchase the hardware card.

Tsuria discloses that consumers purchase hardware cards from a vendor (see Column 6, Lines 9-15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify receipt of a consumer's hardware card, as taught by Takagawa and Nguyen, to allow a consumer to purchase a hardware card from a vendor, as taught by Tsuria, for the purpose of preventing substantial losses to operators of television transmission systems (see Column 1, Lines 26-27 of Tsuria).

6.   Claims 21-22, 24-25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Takagawa et al. (U.S. Patent No. 5,987,612).

Referring to claim 21, Tsuria discloses offering a consumer one or more electronic hardware cards for purchase (see Column 6, Lines 9-10 for purchasing a hardware card from a vendor). The examiner notes that a vendor is defined as, "one that sells or vends". Therefore, a vendor inherently offers (vends) goods or services for purchase, such as a hardware card (see definition of "vendor" and "vends" from www.dictionary.com).

Tsuria also discloses that the cards can be inserted into a corresponding slot of a

television-tuning device used by the consumer (see Column 5, Lines 30-31 for inserting

a smart card 18 into a smart card slot 20 of a decoder 10 in Figure 1).

Tsuria also discloses purchasing by the consumer an electronic hardware card

(see Column 6, Lines 17-19 for purchasing one or more smart cards).

Tsuria also discloses loading the electronic hardware card into the television-

tuning device (see Column 5, Lines 30-42 for loading a smart card into a decoder in

Figure 1).

Tsuria fails to disclose that the smart card can enable the television-tuning device

to access different store electronic program guide information and the specifics of the

loader program functionality discussed in the rejections of claims 3 (now cancelled) and

claims 6-7 and 31.

De Vito discloses that a smart card contains a user interface module (electronic

program guide information), which is enabled when plugged into a decoder (television

tuning-device) (see Column 9, Lines 1-15 and Figure 3).

De Vito discloses that each loader program comprises a decoder segment (see

Column 4, Lines 35-62 for using ECM data for descrambling scrambled (encoded) data

packet payload information) to decode encoded (scrambled) electronic program guide

information (see Column 3, Lines 47-56 for distributing incoming data packet

information to the appropriate applications and Column 3, Lines 60-64 for an application

being a program guide, which uses the incoming information (scrambled/encoded data

packets) which are descrambled using the ECM data described at Column 4, Lines 35-

62) from the electronic program guide provider to which the loader program

corresponds (see Figure 4 and Column 10, Lines 42-55 for the user interface module

(loader program) being integrated into the main user interface stored in the viewer's

television tuning device and that the main user interface program guide data is received

from an electronic program guide provider (see again Column 3, Lines 40-64)). Also

note that the ECM data in the data packets are received from the broadcaster (see

Column 4, Lines 37-42) and are stored in the smart card 10 (see Column 4, Lines 54-

56), therefore the loader program (user interface module and entitlement data (ECM

and EMM data)) corresponds to the electronic program guide provider.

The examiner notes that because of the broad recitation of "loader program" the

examiner is interpreting a "loader program" to be any piece of data provided by the

hardware card that is used to provide a piece of functionality to the STB after it is

plugged into the STB card reader (see smart card reader 140 in Figure 2 of Nguyen).

De Vito also discloses that the loader program (data stored on the smart card)

includes a database segment to transfer the loader program into the television-tuning

device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user

interface module (loader program) into the decoder). Therefore, the database segment

that provides data transfer from the smart card to the decoder is provided by De Vito,

otherwise no data transfer would be able to take place.

De Vito also discloses that each loader program (data stored on the smart card)

includes a segment to provide a user interface (see Column 10, Lines 18-30 for the

Card Retrieval function providing a segment (program code) needed to provide the

display screen) and that the hardware card contains information that specifies to a user

what the user must do to load the data into the television-tuning device (see Figure 2 for

providing the user interface which instructs a user how to access data on the smart

card).

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to modify the smart card, as taught by Tsuria, using the smart

card with electronic program guide information, as taught by De Vito, for the purpose of

providing a flexible solution to allow evolution of a user interface (see Column 2, Lines

13-14 of De Vito) by adapting a user interface module to each user based on the

content stored on a portable smart card (see Column 2, Lines 15-17 of De Vito).

Tsuria and De Vito both fail to teach accessing EPG information from different

EPG providers.

Nguyen discloses a television-tuning device (see set top box 22 in Figure 1) that

contains an input for a hardware card (see smart card reader 140 in Figure 2 and

Paragraph 0035). The television-tuning device is capable of being instructed to access

an WWW (EPG) server using URL data in order to access an EPG provider from among

a plurality of EPG providers (see Paragraph 0024).

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art to modify the hardware card system, as taught by Tsuria and De

Vito, to utilize the television tuning device with hardware card reader, which uses a URL

to access an EPG provider, as taught by Nguyen, for the purpose of allowing a user to

invoke a web based electronic program guide seamlessly upon execution of an

appropriate command to retrieve the EPG (see Paragraph 0048 of Nguyen).

Tsuria, De Vito and Nguyen fail to disclose that the hardware card stores specific

information, which allows a computing device to connect to the Internet to receive

additional information.

Takagawa discloses a hardware card having an acceptable form factor for

insertion into the slot (see Figure 4), comprising a case having a form factor (see IC or

magnetic card 9b in Figures 1 and 2 and Column 4, Lines 10-12) and a non-volatile

memory situated within the case (see Column 4, Line 12 for the cards storing data

within the card) and having data including a URL corresponding to a server (see

Column 4, Lines 57-60), the card further comprising means for providing the data to a

computer to enable the computer to connect to a server over the Internet transmission

network (see Column 4, Line 66 through Column 5, Line 2), wherein the server, upon

being connected to by the computer, indicates how to access the data on the server

(see Column 5, Lines 2-5). Therefore, Takagawa provides a hardware card storing data

(the URL) configured to provide the device with capability to received Internet data

(EPG data provided over the Internet by Nguyen). Therefore, Takagawa clearly

discloses that a hardware card can be used to access Internet information when

inserted into a computing device.

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to modify the STB, as taught by Nguyen, to accept a hardware

card that accesses data from the Internet, as taught by Takagawa, for the purpose of

providing a simpler way to retrieve data and provide an environment for a user to easily access the Internet (see Column 11, Lines 65-66 of Takagawa). Therefore, the additional of Takagawa would provide the combination of De Vito, Nguyen and Tsuria with a hardware card that is capable of receiving information from a remote source, such as the Internet.

Claim 22 corresponds to claim 21, where Tsuria discloses inserting a smart card into a television-tuning device (see Column 5, Lines 30-33) and the subscriber inserting the smart card into television-tuning device (see Column 7, Lines 24-27).

Claim 24 corresponds to claim 21, where Tsuria discloses initially comprising receiving of the television-tuning device by the consumer (see Column 4, Line 67 and Column 5, Lines 1-4 for initially receiving a decoder installed in a room of the subscriber's residence).

Claim 25 corresponds to claim 24, where Tsuria discloses that receiving of the television-tuning device by the consumer (see the rejection of claim 24) includes purchasing of the television-tuning device by the consumer (see again Column 4, Line 67 and Column 5, Lines 1-4 for purchasing the received decoder installed at the subscriber's residence).

Referring to claim 39, see the rejection of claim 24 and further note that the EPG

provider is located at the cable or satellite provider, as taught by Nguyen. Therefore if

the cable provider supplies the cable box to the user, then the EPG provider is a part of

the cable provider, therefore the EPG provider is supplying the cable box as well.

7.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria

(U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in

further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in

further view of Forrester (Can Sleepy Set-Top Boxes Ever Be Sexy?, Fall 1999, TBS

Archives).

Referring to claim 26, Tsuria, De Vito and Nguyen disclose all of the limitations in

claim 24, as well as receiving of the television-tuning device by the consumer (see the

rejection of claim 24), but fail to disclose providing of the television-tuning device by a

merchant to the consumer free-of-charge to the consumer.

Forrester discloses that the merchant BSkyB gave away television-tuning

devices (STBs) free-of-charge to consumers (see Page 1, Paragraph 5).

At the time the invention was made, it would have been obvious for a person of

ordinary skill in the art, to modify the sale of television-tuning devices, as taught by

Tsuria, De Vito and Nguyen, by providing the consumers television-tuning devices free-

of-charge, as taught by Forrester, for the purpose of enticing more consumers to

subscribe to a merchant's particular programming services.

8.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria

(U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in

further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in

further view of the U.S. Department of Justice (Undercover Customs Operation Results

in Charges and Pleas in Connection with Stolen Satellite Television).

        Referring to claim 27, Tsuria, De Vito and Nguyen disclose all of the limitations in

claim 24, but fail to disclose that when a receiver is purchased, the smart card is

included along with the television-tuning device.

        The U.S. Department of Justice has provided a press release stating that when a

customer signs a contract with DirecTV, a smart card comes with the receiver that the

customer inserts into a box on a television to activate the service (see Page 1,

Paragraph 6).

        At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to modify receiving of the television-tuning device, as taught by

Tsuria, De Vito and Nguyen, by providing the consumer with the television-tuning device

along with a smart card, as taught by the U.S. Department of Justice, for the purpose of

providing specialized programming to customers for a periodic flat fee (see Page 1,

Paragraph 6 of the U.S. Department of Justice's Press Release).

9.   Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria

(U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in

further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in

further view of Cooper et al. (U.S. Patent No. 6,754,904).

Referring to claim 28, Tsuria, De Vito and Nguyen disclose all of the limitations in

claim 24, as well as De Vito disclosing access to a provider by the television-tuning

device (see Column 3, Lines 40-56 for accessing data packets sent from a broadcaster

(provider) by a decoder (television-tuning device)).

De Vito also discloses receiving different electronic program guide information

(see Column 3, Lines 60-64 for receiving electronic program guide information for

upcoming events, therefore providing a variety of different information (also see Column

7, Lines 45-55 for different types of information) associated with the electronic program

guide hardware card inserted into the television-tuning device (see Column 9, Lines 1-

18 for providing a user interface module stored on a smart card, to integrate into the

main user interface in the television-tuning device).

However, Tsuria, De Vito and Nguyen are silent as to the broadcaster (provider)

being a provider server.

Cooper discloses that different EPG information can be transmitted in the VBI of

traditional video signals through a server 506 (see Column 5, Lines 16-32).

At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to modify the broadcaster, as taught by De Vito, Tsuria and

Nguyen, using the server for transmitting the EPG information through the VBI, as

taught by Cooper, for the purpose of unobtrusively transmitting information to the set-

top boxes (see Column 5, Lines 27-28 of Cooper).

10.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria

(U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in

further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in

further view of Spies et al. (U.S. Patent No. 6,055,314).

        Referring to claim 29, Tsuria, De Vito and Nguyen disclose all of the limitations in

claims 24, as well as Tsuria disclosing purchasing the electronic program guide

hardware card by the consumer (see the rejection of claim 21) and De Vito indicating

the different electronic program guide information associated with the electronic

program guide hardware card (also see the rejection of claim 21).

        However, Tsuria, De Vito and Nguyen are silent as to registering the hardware

card with a provider server.

        Spies discloses registering an IC card 50 with a merchant computing unit 44

using a credential 54 and once the IC card is approved (registered) with the provided

credential, the viewer is allowed to access the information (see Column 6, Lines 34-58).

The examiner notes that since the merchant computing unit serves the viewer with the

information, it is therefore a server provider as recited in the claim.

        At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to modify the program guide smart card distribution system, as

taught by Tsuria, De Vito and Nguyen, using the smart card registration system, as

taught by Spies, for the purpose of eliminating the risk that cracking a specific hardware

component such as the STB will compromise the entire system (see Column 2, Lines 4-5 of Spies).

11.   Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Takagawa et al. (U.S. Patent No. 5,987,612) in further view of Tushie et al. (U.S. Patent No. 6,014,748).

Claim 23, corresponds to claim 21, where Tsuria discloses inserting a smart card into a television-tuning device (see Column 5, Lines 30-33) and the subscriber inserting the smart card into television-tuning device (see Column 7, Lines 24-27), but fails to disclose that a merchant loads the card into the television-tuning device.

Tushie discloses that a merchant is capable of loading a smart card and configuring the smart card before being sent to a consumer (see Figure 1 and Column 11, Line 64 through Column 12, Line 26).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the subscriber installing the electronic program guide hardware card, as taught by Tsuria and De Vito, with a merchant providing the installation, for the purpose of the card issuers to use any type of personalization equipment to handle multiple types of smart cards, and their attendant operating systems, and to embed the issuer's specific card application along with the required

cardholder data in any of the various types of smart cards (see Column 2, Lines 28-34 of Tushie).

Conclusion

12.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.
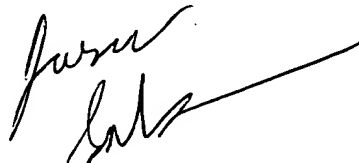
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Jason P Salce
Primary Examiner
Art Unit 2623

June 5, 2006